

Claims

1. Reflective layer for the attenuation of electromagnetic radiation, including at least one reflective layer, including at least one reflective component, characterised in that
 - for the reflective layer, serving as reflective component, a substance or a mixture of the group of the following substances is selected: carbon particles or fibres, in particular carbon black and/or graphite and/or an electrically conductive graphite composition, metal particles and/or fibres, in particular copper, aluminium, steel, titanium and/or iron particles or fibres as well as particles of metal alloys, that
 - the reflective layer attenuates electromagnetic radiation in a range of 16 Hz up to 10 GHz by more than 10 dB, that
 - the reflective layer is waterproof and water vapour pervious; that
 - the reflective layer is weather-resistant, and that
 - the reflective layer is adapted for applying a potential compensation means.
2. Reflective layer according to claim 1, characterised in that the reflective layer attenuates the electromagnetic radiation in a range between 200 MHz and 10 GHz by more than 10 dB.
3. Reflective layer according to claim 1, characterised in that the reflective component includes a binder.
4. Reflective layer according to claim 1, characterised in that the reflective layer is of multiple layer structure, wherein at least one layer of the reflective layer includes a mixture of a binder and a reflecting component.

5. Reflective layer according to claim 4, characterised in that a layer of the reflective layer takes the form of a metal layer, in particular a metal layer formed by vapour-coating.
6. Reflective layer according to claim 4, characterised in that the reflective layer includes at least one layer having a reflective component composed of a metal or metal alloy and at least one layer including a reflective component of a non-metal.
7. Reflective layer according to claim 1, characterised in that the binder is a single or dual component resin, in particular an epoxy resin, a polyurethane resin composition and/or a polyacrylate composition.
8. Reflective layer according to claim 1, characterised in that the binder is water vapour pervious.
9. Reflective layer according to claim 1, characterised in that the incident electromagnetic radiation in a range of 16 Hz up to 10 GHz, preferably in a range of 200 MHz up to 10 GHz, is attenuated by more than 15 dB, preferably by more than 20 dB, at least regionally.
10. Reflective layer according to claim 1, characterised in that the reflective layer is designed for the mechanical application, in particular by interhooking of a potential compensation means.
11. Reflective layer according to claim 1, characterised in that the reflective layer is applied onto a substrate, in particular onto a non-woven web or a foil.
12. Reflective layer according to claim 1, characterised in that the substrate material is produced of a plastics, in particular of polyester, polyethylene,

polyacrylate, glass fibre, paper, polyamide, polyurethane or textile fibres or mixtures of the aforesaid fibre and/or resin types.

13. Reflective layer according to claim 1, characterised in that the reflective layer and where applicable also the substrate is in the form of a flexible strip.
14. Reflective layer according to claim 1, characterised in that the reflective layer has normal flame resistance, being classified as fire protective class B2.
15. Reflective layer according to claim 1, characterised in that a foamed layer which optionally contains a flame retardant has been applied onto a reflective layer.
16. Reflective layer according to claim 1, characterised in that in the case of a multiple layer strip including a reflective layer, the reflective layer is provided on the outside or the inside.
17. Reflective layer according to claim 1, characterised in that a dispersion agent, a softening agent and/or an agent counteracting embrittlement of the reflective layer, stabilisers and/or flame retardants have been added to the reflective layer.
18. Reflective layer according to claim 1, characterised in that the reflective layer after an exposure of 1 month to the weather attenuates the electromagnetic radiation incident onto the reflective layer in a range between 16 Hz up to 10 GHz, preferably in a range of 200 MHz up to 10 GHz unchanged by more than 10 dB.
19. Process for attenuating electromagnetic radiation in which

- a waterproof and water vapour pervious reflective layer for attenuating electromagnetic radiation includes at least one layer of a reflective component and a binder, and in which the reflective layer is adapted for the application of a potential compensation means,
- is applied in such a manner that the reflective layer faces the incident electromagnetic radiation,
- a potential compensation means is fitted and, where applicable, a plurality of reflective layers are interconnected by means of a potential compensation means.

20. Process according to claim 19, characterised in that as a reflective component a substance is used or a mixture selected from the group of the following substances: carbon particles or fibres, in particular carbon black and/or graphite and/or an electrically conductive graphite composition, metal particles and/or fibres, in particular copper, aluminium, titanium, steel and/or iron particles or fibres as well as particles of a metal alloy.

21. Potential compensation means for use for connecting two reflective layers according to any one of claims 1 to 18, characterised in that the potential compensation means takes the form of a metal strip or as a strip comprising the features of the reflective layer according to at least one of claims 1 to 18.